

1 **Supplementary Fig. 1. *In silico* model of H-1PV VP2 capsid protein.** The ribbon diagrams of H-
2 1PV (red) and MVM (blue) VP2 are superimposed showing the positions of the conserved β -
3 strands, β B to β I, helix α A, and loops regions. The first N-terminal residue (G38 for H-1PV
4 corresponding to G39 for MVM) and the last C-terminus residues (Y592 for H-1PV corresponding
5 to Y587 for MVM) are numbered with reference to the VP1 sequence of which VP2 is an integral
6 part. The approximate position of the icosahedral two-, three-, and fivefold axes are shown as filled
7 oval, triangle, and pentagon, respectively. This figure was generated using the CPHmodels 3.0
8 Server at the Center for Biological Sequence Analysis of the Technical University of Denmark
9 DTU as described in the Materials and Methods section.

10

11 **Supplementary Fig. 2. 3D structural alignment of H-1PV and MVM VP2s and identification**
12 **of potential H-1PV sialic acid binding residues.** MVM VP2 from model 1Z14 (pink) and H-1PV
13 VP2 sequence (light blue) were aligned using the "align" routine implemented in the PyMol
14 software. Only the MVM VP2 region 361-369 containing amino acids Ile-362 and Lys-368
15 (displayed in red) known to bind to sialic acid is represented. The related residues in the H-1PV
16 VP2 sequence 366-374 are Ile-367 and His-373 (displayed in deep blue).

17

18



